

Request for  
Qualifications  
On-Call Consultant  
2021-2023 Biennium

Project No. 2021-803  
On-Call Testing Services

March 26, 2021

Submitted by:



*"Thank you so much  
for trusting in  
Krazan.  
We appreciate  
your business and  
look forward to  
continuing to be of  
service to you and  
the agencies you  
represent."*

Diane Vandewall  
825 Center Street, Suite A  
Tacoma, WA 98409  
253-939-2500  
dianevandewall@krazan.com





**STATE OF WASHINGTON**  
**DEPARTMENT OF ENTERPRISE SERVICES**

*1500 Jefferson St. SE, Olympia, WA 98501  
PO Box 41476, Olympia, WA 98504-1476*

**Designated Point of Contact for Statement of Qualifications**

Point of Contact Name and Title <b>Diane Vandewall, Client Manager</b>		
Firm Name <b>Krazan &amp; Associates, Inc.</b>		
Address <b>825 Center Street Suite A</b>		
City <b>Tacoma</b>	State <b>WA</b>	Zip <b>98409</b>
Telephone <b>253-939-2500</b>	Email <b>dianevandewall@krazan.com</b>	

**Addresses of multiple office locations of firm (if applicable)**

Address <b>4303 198th Street SW</b>	
City <b>Lynnwood, WA 98036</b>	Phone <b>425-485-5519</b>
Address <b>1230 Finn Hill Road NW, Suite A</b>	
City <b>Poulsbo, WA 98370</b>	Phone <b>360-598-2126</b>
Address <b>121 E. 8th Street</b>	
City <b>Port Angeles, WA 98362</b>	Phone <b>360-477-4010</b>
Address <b>825 Center Street Suite A</b>	
City <b>Tacoma, WA 98409</b>	Phone <b>253-939-2500</b>

**Diverse Business Certifications (if applicable)**

***Certification issued by the Washington State Office of Minority and Women's Business Enterprise (OMWBE)***


- ☐ Minority Business Enterprise (MBE)
- ☐ Woman Business Enterprise (WBE)
- ☐ Minority Women Business Enterprise (MWBE)

***Certification issued through the Washington State Department of Veteran's Affairs***

- ☐ Veteran Owned Business

***Certification issued through Washington Electronic Business Solution (WEBS)***


- ☐ Small Business Enterprise (SBE)

<b>ARCHITECT-ENGINEER QUALIFICATIONS</b>					1. SOLICITATION NUMBER <i>(If any)</i>	
					2021-803	
<b>PART II - GENERAL QUALIFICATIONS</b>						
<i>(If a firm has branch offices, complete for each specific branch office seeking work.)</i>						
2a. FIRM (OR BRANCH OFFICE) NAME				3. YEAR ESTABLISHED		4. DUNS NUMBER
Krazan & Associates of Washington, Inc. (Krazan)				1982		11-859-1817
2b. STREET				5. OWNERSHIP		
4303 198 <sup>th</sup> Street SW				a. TYPE		
2c. CITY		2d. STATE	2e. ZIP CODE	Corporation		
Lynnwood		WA	98036	b. SMALL BUSINESS STATUS		
6a. POINT OF CONTACT NAME AND TITLE				n/a		
Jeff Mercer, Operations Manager				7. NAME OF FIRM <i>(If block 2a is a branch office)</i>		
6b. TELEPHONE NUMBER		6c. E-MAIL ADDRESS		Krazan & Associates, Inc.		
425-485-5519		jeffmercerc@krazan.com		215 W Dakota, Clovis, CA 93612		
8a. FORMER FIRM NAME(S) <i>(If any)</i>				8b. YR. ESTABLISHED		8c. DUNS NUMBER
n/a				n/a		n/a
<b>9. EMPLOYEES BY DISCIPLINE</b>				<b>10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS</b>		
a. Function Code	b. Discipline	c. No. of Employees		a. Profile Code	b. Experience	c. Revenue Index Number <i>(see below)</i>
		(1) FIRM	(2) BRANCH			
02	Administrative	61	6	EO9	Environmental Impact Studies, etal	2
15	Construction Inspector	75	23	E13	Environmental Testing & Analysis	1
23	Environmental Engineer	0	0	S05	Soils & Geologic Studies, etal	5
27	Foundation/Geotechnical Eng.	28	5	T02	Testing & Inspection Services	9
30	Geologist	12	0			
48	Project Manager	19	3			
58	Technician / Analyst	57	8			
	Other Employees					
	<b>Total</b>	252	45			
11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS <i>(Insert revenue index number shown at right)</i>		PROFESSIONAL SERVICES REVENUE INDEX NUMBER				
a. Federal Work	9	1. Less Than \$100,000		6. \$2 million to less than \$5 million		
b. Non-Federal Work	9	2. \$100,000 to less than \$250,000		7. \$5 million to less than \$10 million		
c. Total Work	9	3. \$250,000 to less than \$500,000		8. \$10 million to less than \$25 million		
		4. \$500,000 to less than \$1 million		9. \$25 million to less than \$50 million		
		5. \$1 million to less than \$2 million		10. \$50 million or greater		
<b>12. AUTHORIZED REPRESENTATIVE</b>						
The foregoing is a statement of facts.						
a. SIGNATURE					b. DATE	
					3/01/2021	
c. NAME AND TITLE						
Jeffrey S. Mercer, Operations Manager						

ARCHITECT-ENGINEER QUALIFICATIONS				1. SOLICITATION NUMBER (If any)	
				2021-803	
PART II - GENERAL QUALIFICATIONS					
(If a firm has branch offices, complete for each specific branch office seeking work.)					
2a. FIRM (OR BRANCH OFFICE) NAME			3. YEAR ESTABLISHED		4. DUNS NUMBER
Krazan & Associates of Washington, Inc. (Krazan)			1982		11-859-1817
2b. STREET			5. OWNERSHIP		
825 Center Street, Suite A			a. TYPE		
2c. CITY		2d. STATE	2e. ZIP CODE		
Tacoma		WA	98409		
6a. POINT OF CONTACT NAME AND TITLE			b. SMALL BUSINESS STATUS		
William B. Throne, Operations Manager			N/A		
6b. TELEPHONE NUMBER		6c. E-MAIL ADDRESS		7. NAME OF FIRM (If block 2a is a branch office)	
253-939-2500		<a href="mailto:billthrone@krazan.com">billthrone@krazan.com</a>		Krazan & Associates (Corp Office) 215 W Dakota Ave, Clovis CA 93612	
8a. FORMER FIRM NAME(S) (If any)			8b. YR. ESTABLISHED		8c. DUNS NUMBER

9. EMPLOYEES BY DISCIPLINE				10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS		
a. Function Code	b. Discipline	c. No. of Employees		a. Profile Code	b. Experience	c. Revenue Index Number (see below)
		(1) FIRM	(2) BRANCH			
02	Administrative	61	6	S05	Soils & Geologic Studies, et.al.	5
15	Construction Inspector	75	13	T02	Testing & Inspection Services	9
27	Foundation/Geotechnical Engineer	28	5			
30	Geologist	12	0			
48	Project Manager	19	3			
58	Technician / Analyst	57	4			
	Other Employees					
	<b>Total</b>	252	31			

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS <i>(Insert revenue index number shown at right)</i>		PROFESSIONAL SERVICES REVENUE INDEX NUMBER	
		1. Less Than \$100,000	6. \$2 million to less than \$5 million
		2. \$100,000 to less than \$250,000	7. \$5 million to less than \$10 million
a. Federal Work	9	3. \$250,000 to less than \$500,000	8. \$10 million to less than \$25 million
b. Non-Federal Work	9	4. \$500,000 to less than \$1 million	9. \$25 million to less than \$50 million
c. Total Work	9	5. \$1 million to less than \$2 million	10. \$50 million or greater

<b>12. AUTHORIZED REPRESENTATIVE</b> The foregoing is a statement of facts.	
a. SIGNATURE 	b. DATE 03/22/2021
c. NAME AND TITLE William B. Throne, Operations Manager	



## Qualifications of Key Personnel

### Company and Team Introductions

**KRAZAN.** Founded in 1982 in Fresno California, Krazan has grown to thirteen offices, of which, **four are in Washington State.** Krazan performs services for many local and national clients in both the private and public sectors. Locally, Krazan has nearly 75 field inspectors with accreditations to support the many agencies represented by the Department of Enterprise Services. Additionally, Krazan provides geotechnical and environmental engineering rounding out our suite of services.

Flexibility and our depth of experience allows us to work quickly and efficiently. As in the past, our Client Manager, Diane Vandewall, reviews the scope of work and location of project, and coordinates with the most appropriate office to execute the work.

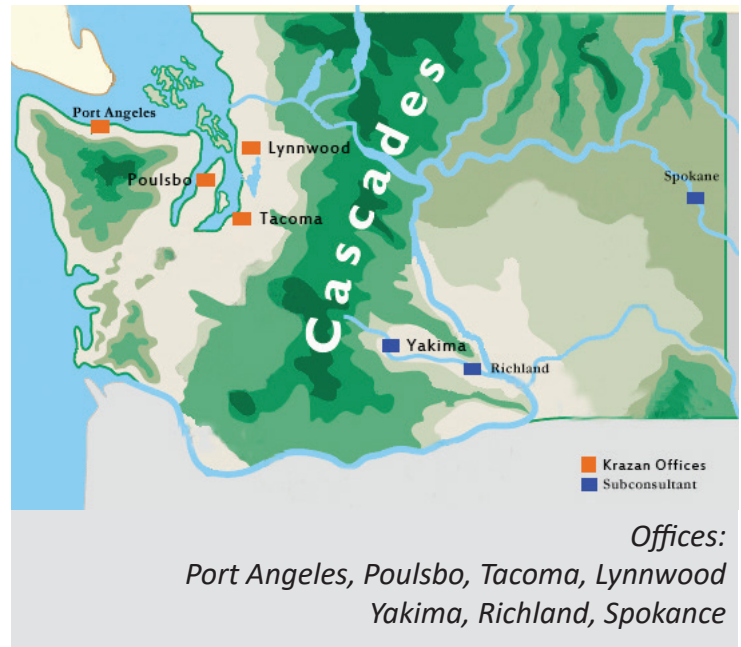
Krazan has strengthened our team by adding **Baer Testing** located in Yakima and Richland to our team. We have a great relationship with Steve Baer, owner of Baer Testing. We recently worked with Baer on a couple of large retail site developments. We choose to collaborate with Baer Testing due to their professionalism and quality of work product.

**While we understand the need for cost-efficient coverage of Eastern Washington, our strength is that we have offices to cover those agencies westside of the Puget Sound, along the Peninsula. Our staff in Poulsbo and Port Angeles have provided support to Peninsula College, Olympic College, the Military and Department of Corrections.**

The following are brief resumes and the organizational structure of the core team.

#### Ken Sahi, PE - Principal-in-Charge

Mr. Sahi has 40 years of engineering experience including the management of all laboratory materials testing, design of concrete and asphaltic mixes, special testing of steel products, and construction management responsibility for numerous ICC special inspections, materials testing, and earthwork projects. In the past ten years, Mr. Sahi has served as the principal in-charge/project engineer on various on-call contracts including, but not limited to, King County, Port of Seattle, and Washington State Department of Enterprise Services (and previously the Department of General Administration).



*We are honored that the State of Washington has selected Krazan to be on the list of approved agencies for the On-Call Materials Testing Biennium for the past 14 years. We are proud to have been selected and we do not take this contract or this work for granted. We work hard every day to validate your continued faith in Krazan and we constantly work to improve ourselves and the quality of our services.*

#### WA State DES Project Manager

##### Kulwant "Ken" Sahi, PE

Principal-in-Charge

##### Diane Vandewall

Client Manager

##### Jeff Mercer

North Puget Sound

##### Wes Mahan

Olympic Peninsula

##### Bill Throne

South Puget Sound

70+ Certified Special Inspectors and Support Personnel

##### Steve Baer

**Baer Testing**

(Yakima, Richland)

### **Diane Vandewall - Client Manager**

Ms. Vandewall has over 20 years of experience in the architecture, engineering and construction industry. Her experience has ranged from providing design services for tenant improvements, accounts payable/receivables, to providing strategic account management services to large engineering firms. She is currently serving as the Client Manager for WA State DES, University of Washington, and WA State Parks and Recreation Commission contracts.



### **Bill Throne - Operations Manager (South Sound)**

Mr. Throne has over 30 years of experience in the testing and inspection industry. He has a BA in Russian Language and Literature from the University of Kansas, where he also took additional course work in geology. His current responsibilities include oversight of technical operations, technical engineering personnel, and administration of the certified materials laboratory. In addition, Mr. Throne performs field and laboratory special inspections and materials testing for soils, asphalt, concrete, masonry, and fireproofing and has acted as lead and assistant inspector on multiple projects. *Key recent DES projects include: Center for Allied Health Education and Clover Parks' New Center for Advance Manufacturing and Technology Building.*



Extensive experience leading on-call contracts including:

- DES over 112 contracts
- City of Tacoma 68 task orders

### **Jeff Mercer - Operations Manager (North Sound)**

Mr. Mercer has over 30 years of experience in field inspection and laboratory testing. He has studied Civil Engineering at University of Washington and Shoreline Community College. His duties include providing quality client service, cost estimating, managing cost controls, supervising the laboratory and serving as WABO Technical Director and Laboratory Supervisor. Some of his other areas of expertise include: construction inspection and testing, concrete mix design and performance review, asphaltic concrete design analysis, construction and subsurface soils investigation, pavement failure analysis, and soil mechanics. *Key recent DES projects include: Bellevue Bldg G Tenant Improvements and CC/UWB New Parking Structure.*



Extensive experience leading on-call contracts including:

- DES over 70 contracts
- King County 50+ contracts

### **Wes Mahan - Operations Manager (Olympic Peninsula)**

Mr. Mahan's expertise is in all areas of special inspection and materials testing including but not limited to: soils, deep foundations, reinforced concrete, pre-stress/post tension concrete, reinforced masonry, structural steel welding, high strength bolting, and sprayed fireproofing. Mr. Mahan also has experience with geotechnical and environmental related projects including: exploratory drilling, retaining walls, slope stabilization, water infiltration, Phase I and II ESAs, HAZMAT surveys, and environmental water/soils analytical testing. *Key recent DES projects include: Olympic College Childcare Parking Lot and Veterans Home Bldg 6& 7 Demolition and Bldg 9 & 10 Renovation Hazmat Surveys.*



Extensive experience leading on-call contracts including:

- DES over 35 contracts
- Public Agency on-calls

## Team Capabilities

### Special Inspections

Quality construction is directly related to inspection, materials testing, and engineering services. Krazan's resources, experience, and credentials are substantial in all areas of Materials Testing and Special Inspections per ASTM E329 and IBC Chapter 17.

- WABO/ICC/ACI Certified Special Inspectors
- Earthwork Observation and Compaction Testing
- Asphalt Sampling and Testing Including Preparation of Mix Design
- Concrete Sampling and Testing
- Aggregate Sampling and Testing
- Concrete and Asphalt Coring and Testing
- Structural Steel Shop and Field Welding Inspections
- Nondestructive Examination of Structural Welds
- High Strength Bolts and Connections Using a Skidmore-Wilhelm Bolt Tension Calibrator
- Proprietary Anchors / Epoxy Dowel Inspections
- Lateral Framing Inspections (Wood Framing & Cold Formed Steel)
- Structural Masonry Testing and Sampling
- Structural Shotcrete Testing and Sampling
- Sampling and Testing of Post-Tensioned and Prestressed Concrete
- Sampling and Testing of Sprayed-Applied Fire-Resisting Materials
- Welder Qualifications
- Roof Consulting – Including Application Verification, Nailing Inspection and Testing
- EIFS – Exterior Insulation Finishing Systems – Installation Verification and Testing
- Waterproofing Verification
- Window Testing by Spray Frame Method
- 3 and 4 point Fall of Potential testing for Electrical Grounding
- Ground Penetrating Rebar (GPR) Investigations
- Mechanical Electrical Plumbing Inspections
- Drill Resistance of Wood Members
- Infrared Thermography Investigations

### Laboratory Testing

Krazan maintains in-house laboratories that are audited and accredited. Below are some examples of tests that Krazan has the capabilities to perform.

- Concrete Compression Cylinders & Cores
- Shotcrete Panels Coring and Testing
- Concrete Absorption and Voids
- Masonry Prisms
- Flexural Beams
- Expansion Bars
- Grout Samples
- Slip / Friction Test
- Freeze Thaw
- Thermal Resistance
- Potential Reactivity – Mortar Bar
- Gypcrete Cubes
- Fireproofing Density and Adhesion/Cohesion Value
- Water Solubles and Acid Solubles in Concrete
- Steel Tensile and Bend Testing
- Wire Coating Thickness and Weight
- Sieve Analysis
- Proctor Value
- California Bearing Ratio
- Hydrometer Analysis
- LA Abrasion
- Permeability
- Consolidation
- Direct Shear
- Unconfined Compression
- WSDOT Compaction Curve (T-606)
- Specific Gravity
- Atterberg Limits
- Sand Equivalent
- Organic Content and Impurities
- Resistivity
- Degradation
- Flat and Elongated Particles
- Soundness
- pH Test
- Accelerated Expansion
- Uncompacted Void Content
- Fracture Face
- Rice Value
- Extraction-Gradation
- Marshall and Superpave Mix Design

## General Project Approach

Krazan will staff this contract with well-coordinated team members that have worked together on previous contracts and have familiarity on a wide range of projects with varying sizes and scopes of work. Staffing assignments are as outlined below.



### Performance

*"We never forget our responsibility to deliver results for our clients."*

#### Client Manager – Diane Vandewall

- Coordinate with operation team for project execution
- Act as a single point of contact for DES project managers
- Serve as a liaison between the State and Krazan's individual office operations/project managers
- Monitor budgets and review all pay applications

#### Principal-in-Charge – Ken Sahi, PE

- Principal-in-Charge for Washington State DES projects
- Ensure project manager requests for additional support are met
- Monitor client satisfaction
- Provide senior technical council and guidance to project managers and lead inspectors
- Perform technical review of the field reports and laboratory test results as needed

#### Operations/Project Managers – Bill Throne, Wes Mahan, Jeff Mercer

- Implementation and maintenance of the quality program
- Track inspection data while assuring that the inspectors perform a professional job
- Provide the project team with status reports when requested
- Provide oversight of the field and laboratory staff
- Coordinate any financial and technical issues revolving around our services
- Oversee the budget and administrative details

**Certified Special Inspectors** - The Krazan team's special inspectors working on this project will coordinate with your project team on a daily basis to perform special inspections, as well as communicate problems, resolutions, and work progress. The field inspectors will be supported by additional inspection staff as dictated by the needs of the various daily construction activities, and in the office by our technical and administrative staff.

## Communication Process by Phase



Clear, concise, and consistent communications are essential to success. Krazan has extensive experience in communicating with a wide range of audiences under various circumstances using the procedures that have been established over our

experience with on-call contracts with numerous agencies. Administration of this team will all start with the dedicated client manager and primary point of contact, Diane Vandewall. Upon notification from the DES project manager regarding a new project, Diane will coordinate with the appropriate Krazan project manager to review any plans/specifications, define the scope of work, and create a project budget for an amendment request. Once the amendment has been executed, the project manager will coordinate with the DES project representative to establish the line of communication.



In the field, our inspectors will complete reports prior to leaving the project site and preliminary copies of reports will be left with the project superintendent/ site representative. Typed field reports will be processed and reviewed by the project manager within 48 hours. After review, all reports will be uploaded to a secure FTP site that Krazan established for the DES project managers. Reports will also be emailed to project team members and building officials as directed by the DES project manager.

Our communication process involves tracking projects, amendments, change orders and invoices for the contract. Krazan maintains a spreadsheet that tracks this information for each project under the on-call agreement. The Krazan project managers for each branch office are responsible to maintain budgets and schedules to ensure that work is completed on time and on budget.

## Quality Assurance Plan

Krazan's QA/QC Plan includes detailed information on administrative procedures, laboratory procedures, and field inspection procedures to meet national and state standards and ensure consistently credible and accurate results and reports. Both internal and external audits ensure compliance with applicable test methods and standards, ensuring both laboratory and field personnel operate and perform within the guidelines of ASTM, ACI, ICC, and AWS.



The Principal-in-Charge will use the manual to verify correct forms, test methods, and test results meet the project requirements. As a requirement of our national accreditations, Krazan performs regular internal audits on all aspects of the QA/QC manuals. This includes, but is not limited to the following:

*We follow all appropriate ASTMs and represent the Owner.*

- 1. Sample Identification and tracking:** Samples as received are given a unique number which follows the sample through testing, reporting and disposal. At any time the sample can be found in our computer system and status can be determined. Once testing is completed and results are reviewed and approved by our project engineer, the samples are disposed of as required by project specifications. Should results indicate that a sample was found not be in compliance, the samples will be retained as required, or at a minimum of a month.
- 2. Report reviews** will occur on all reports for clarity and conformance to governing agency. This peer review is done at two levels, initial by administrative services and final review by project engineer or project manager.
- 3. Laboratory results** are reviewed by laboratory manger and final review and acceptance is performed by project engineer. All reports and final formats are in conformance to QA/QC manuals.

**Sample reports are provided on page 14.** We take great pride in our QA/QC manual and use it daily. All appropriate personnel have reviewed their Quality Assurance Manual / Quality Control Plan procedures and documents, which are available for review upon request.

## Budget and Schedule Control

Krazan utilizes an internally developed project accounting software package (PAS), which can be specifically tailored for an individual project. Line items from our estimate are given separate task codes and tracked. These task codes are linked to our electronic dispatch system, which tells the staff specifically which codes to use so the specific items of the budget can be accurately monitored. With daily input of timecards we can provide an accurate, real time snapshot of any part, or for that matter our entire budget, with a single keystroke. A monthly budget summary (Project Managers Status Report), outlining percent complete by specific line item will be submitted in our monthly report. **An example of a typical PM Status Report**

**is shown on page 13.** Krazan can customize our program to match any schedule provided by the client. Typically, Krazan will report field and laboratory findings 24 hours after completion of test or site visit. Client service is what Krazan strives for on all projects.

## Change Order Procedures

**Krazan will track all re-inspections and budget items.** When a budget is 70-80 percent complete, our client will be notified of any overages that may be needed to complete the project.

## Close-out Methodology

**Krazan will close out a project with a final letter.** Prior to issuing this letter, the project file will be reviewed for any open non-conformances, or work not performed. Any issues found will be address immediately with the appropriate team members.

## Relevant Experience

**DES Specific Experience** | Krazan has had the honor of providing materials testing and inspection services for the DES on over 200 projects statewide going back to 2005. We appreciate the work and do not take this contract for granted. Please see below for a summary of experience.

Number of Projects per Region per Biennium				
Biennium	South Sound (South of I-90)	North Sound (north of I-90)	Peninsula	Eastern WA
05-07	9	1	2	1
07-09	12	12	8	3
09-11	17	12	8	3
11-13	15	18	3	0
13-15	12	11	4	1
15-17	11	11	6	0
17-19	12	9	3	4
19-21	11	8	6	3



**2019-2021 Biennium Past Performance** | The following is an abbreviated list of projects demonstrating variety of scale and scope along with agency diversity; DSHS, WSP, DOC.

State PM	Project Name	Location	Project Budget
Dennis Flynn	Allied Center for Health Education (Medical Mile)	Bates Technical College	\$115,200
Rafael Urena	Sewer Line Collapse Centralia College	Centralia College	\$2,820
Larry Covey	DSHS: KCSCTF Six Bed Expansion	Seattle	\$12,742
Andi Bodnariuk	Military: WYA Classroom Replacement	Bremerton Readiness Center	\$3,400
Richard Howerton	DOC: OCC Radio Tower Installation	Forks	\$4,300
Chad Bedlington	HVAC Direct Digital Controls Upgrade	Skagit Valley College	\$4,219
Young Kim	DOC: MLCC Minimum Facility Remodel	Centralia	\$6,637

David Head	Bldg 18 Generator	Tacoma Community College	\$4,772
Mark Keller	McNeil Island Training Center	McNeil Island	\$771
Gary Wendleken	WSP: FTA Burn Building Repairs	North Bend	\$3,239
Susan Smith	CC/UWB Parking Garage	Bothell	\$121,436
Gary Wendleken	WSP: FTA Water Treatment System Repairs	North Bend	\$19,026
Dave Lohrengel	West Campus Parking Lot	Yakima College	\$7,127
Laurie Kearney	B Classroom & Lab Renovation	Bellevue Community College	\$1,583
Jeff Gonzalez	Parking Lot Expansion	Walla Walla Community College	\$12,618

### **Allied Center for Health Education (aka Medical Mile) – Tacoma, WA**

As the first major capital investment at Bates Technical Colleges downtown campus in 60 years, this facility replaces the West Annex building with a cohesive, holistic health care education facility. The \$43M project will house 11 health education programs in the fields of health, including nursing, dentistry and occupational therapy. The building will increase access to quality programs through increased capacity and the use of shared workspaces. *Project Manager: Dennis Flynn*

### **Cascadia College / UW Bothell West Parking Garage – Bothell, WA**

The 175,000 sf new parking structure provides 600 new parking stalls alleviating the strain on parking demand on campus. The garage is above-ground and is naturally ventilated due to open – air design. This post-tensioned concrete project included a bioswale and a detention tank mitigated stormwater runoff. The trees removed were re-used as nurse logs on site or milled into benches to be re-used on campus. *Project Manager: Susan Smith*

### **Experience with Other Owners with Similar Scope of Work**

<b>Educational Institutions</b>	<b>Agencies</b>	<b>Agencies</b>
<ul style="list-style-type: none"> <li>• University of Washington</li> <li>• Tacoma School District</li> <li>• Federal Way School District</li> <li>• University Place School District</li> <li>• Lake Washington School District No. 414</li> <li>• Franklin Pierce School District No. 402</li> <li>• Seattle School District No. 1</li> <li>• Shoreline School District No. 412</li> <li>• Issaquah School District No. 411</li> <li>• Northshore School District No. 417</li> <li>• Bainbridge Island School District</li> </ul>	<ul style="list-style-type: none"> <li>• King County</li> <li>• King County Housing Authority</li> <li>• King County Library System</li> <li>• Snohomish County</li> <li>• PUD No. 1 of Snohomish Co.</li> <li>• Kitsap County PUD</li> <li>• City of Mountlake Terrace</li> <li>• City of Edmonds</li> <li>• City of Olympia</li> <li>• City of Monroe</li> <li>• City of Bothell</li> </ul>	<ul style="list-style-type: none"> <li>• City of Seattle</li> <li>• City of Everett</li> <li>• City of Bellevue</li> <li>• Tacoma Power</li> <li>• City of Shoreline</li> <li>• City of Redmond</li> <li>• City of Port Townsend</li> <li>• City of Poulsbo</li> <li>• City of Tacoma</li> <li>• City of Marysville</li> <li>• City of Kirkland</li> </ul>

### **University of Washington Master Service Contract – Seattle, WA**

Krazan has been providing construction inspection and testing services to the UW. We have provided, and continue to provide, these services on the following projects:

**Foster School of Business - Founders Hall:** 85,000 square-foot building will house classrooms, student team rooms and much-needed space for student programs, career services and experiential learning centers. It

will be one of the greenest buildings on campus, designed to achieve a 79 percent reduction in energy consumption over the first 60 years of its life. *Founders Hall also will be the first building at the UW to be constructed of cross-laminated timber (CLT).*

**Lot N22 Campus Parking Lot:** Soil compaction testing on the subgrade, base course, and native/backfill material with associated lab testing. Inspection and testing of porous concrete, structural reinforced concrete, and reinforcing steel. Associated laboratory testing of the soils and concrete will include proctor value, sieve analysis, sand equivalent, percent moisture, and concrete compressive strength testing.

**Ocean Teaching Building Safe Access:** Structural steel and mechanical anchor bolt installation inspections for a new perimeter roof guardrail at the UW Ocean Teaching Building.

**Harborview Research & Training Building Phase 4:** After the radiation leak the building is now accessible and so UW is re-building a portion of the building. Krazan is providing WABO Special Inspection for epoxy/wedge bolt anchors, masonry, reinforcing steel, and welding inspections for the re-build project at the Harborview Campus.



### Quileute Tribal School / Move to High Ground – La Push, WA

The project consisted of a new K-12 building, which covers an area of approximately 59,000 sf. Construction also includes detention ponds, paved driveways and parking areas, bus barn, outdoor play area, and landscaping. The new school is part of the Tribe's "Move to Higher Ground" program and is being constructed on previously forested land farther inland from the coast above the reach of tsunami waves and flood waters.

*Krazan performed a geotechnical investigation, including subsurface exploration and laboratory testing, to evaluate the soils and provide geotechnical recommendations for foundation design of the new school and its new 288,000-gallon water tank.*



School Building at sea level



New School Building

*Krazan is also providing construction inspection and testing for soil and asphalt compaction, reinforced concrete, structural framing, and post-installed anchor inspections, floor moisture testing, and all associated laboratory testing.*

### The Carnegie Building Rehabilitation – Snohomish, WA

This project consisted of the rehabilitation and restoration of the Carnegie Building, which was originally constructed in 1910. The updates changed the use of the building from a library to a community center. Improvements will include restoring the original entrance with a staircase and lift access to the upper and lower levels, new restrooms, and a new plaza, as well as associated site work.

The City's main priorities on this project were to preserve the building, create a usable site, upgrade main floor, and make the building accessible to people with disabilities. Future improvements planned on the project site



Carnegie Building



include reinstalling a War Memorial monument and improving the basement. Total construction cost is approximately \$3.5 million.

*Krazan's scope of work on this project included proprietary anchor, reinforced concrete, wood framing, and structural steel inspections. Krazan also performed a limited geotechnical investigation as well as soil compaction testing for the site.*

### **Washington High School STEM – Tacoma, WA**

Washington High School has won a \$4.3 million grant through the Washington Science, Technology, Engineering, and Mathematics (STEM) Pilot Facilities grant the Washington Legislature appropriated during their last regular session. The grant paid for an addition to the 900 building, and included a complete renovation of the existing building. The learning spaces created by this grant accommodate aerospace manufacturing, computer-aided design (CAD), and a larger-than-typical collaborative classroom in which biology, chemistry, physics and engineering classes can be taught. The STEM Academy is meant to function as a work-like environment, where students come to learn, develop skills and prepare themselves for 21st Century careers. Funds resulting from the passing of the 2016 Bond helped cover the total \$5.4M cost of the new STEM facility.



*Krazan provided testing and inspection services for the construction of this project which included, but are not limited to, soil compaction, asphalt compaction, reinforced concrete inspection, concrete compressive strength samples, structural masonry inspections, structural steel welding, light gauge steel inspections, proprietary anchor inspections, and spray applied fireproofing inspections.*

### **Ruby Bridges Elementary School – Woodinville, WA**

This project consisted of a new, three story, 76,191 square foot K-5 elementary school that will accommodate 550 students. The new school contains 34 classrooms, administrative offices, library, gymnasium, cafeteria/commons, kitchen, and covered play area. Outdoor amenities will include a combined softball/elementary playfield, primary and elementary hard/soft outdoor play areas, and parking.



The project also included the construction of roadways, a bus loop, offsite utility extensions, and associated site work. Construction cost for the new school was approximately \$80 million.

*Krazan provided proprietary anchor, reinforced concrete, structural masonry, structural steel, and cold formed steel inspections, as well as soil and asphalt compaction testing.*

### **WA State Parks & Recreation Commission 2019-2021 On-Call Testing & Inspection Services – Various Locations, WA**

The following are a few representative projects Krazan has executed:

- Fort Casey ADA Improvements
- Fort Worden Upper Camp Comfort Station
- Willapa Hills Trail State Park

The following pages are those referenced in sections above:

- **Inspector resource matrix** located on page 11-13
- **Monthly budget and pay application tracker** noted on page 14
- **Project Manager Status Report** noted on page 14
- **Sample Reports** noted on page 15

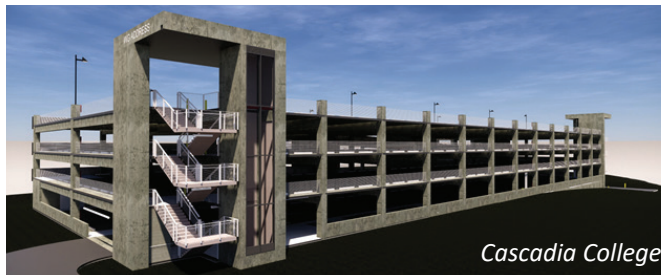
PERSONNEL CERTIFICATION MATRIX - South Sound Region																					
			Frank Adams	Wm. (Mike) Allen	Amelia Barrett	Vijay Chaudhary, PE	Randy Hansen	Noorullah Ibrahim Khel	Marty Mundy	Manil Neupane, EIT	Theresa Nunan	Justin Pinkley	James Polwarth	Ken Sahi, PE	Lian Paulo Salvan	Satnam Singh	Michael Thomas	Bill Throne	Jeff Tuttle	Anders Tvedt, EIT	Matt Zukowski
Project Manager			X			X					X			X				X			
Nuclear Densometer Training			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ACI	Concrete Field Tech - Grade 1		X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	
	Concrete Lab Tech - Grade 1										X						X				
	Masonry Field Tech											X									
	Aggregate Testing Tech - Level 1																X				
ICC	Special Inspector - General (SI)				X												X				
	Building Inspector (BI)		X																		
	Soils (Soils)											X		X			X				
	Reinforced Concrete (RC)		X	X			X		X			X		X		X					
	Prestressed Concrete (PSC)		X				X					X		X							
	Structural Masonry (SM)		X				X					X		X		X					
	Fireproofing (FP)											X		X		X	X				
	Structural Welding (SW/SSW)													X		X					
	Structural Bolting (SB/SSB)													X							
WABO	Concrete Placement Insp. (PI)						X		X						X		X			X	X
	Reinforced Concrete (RC)		X	X			X		X			X		X				X			
	Structural Masonry (SM)		X				X					X		X		X		X			
	Reinforced Shotcrete (SC)		X	X					X					X				X			
	Prestressed Concrete (PC)		X				X					X		X				X			
	Proprietary Anchors (PA)			X	X		X		X	X		X			X	X	X		X	X	X
	Lateral Wood Framing (LW)								X							X					
	Spray App. Fire Resistive Materials (FP)											X		X		X		X			
	Fire Resistant Pen. & Joints (FS)											X									
	Cold-Formed Steel Framing (CF)															X					
	Structural Welding (SW)													X		X			X		
	Structural Steel & Bolting (SSB)													X		X					
	Technical Director													X							
	Laboratory Supervisor																	X			
	Field Supervisor											X		X		X		X			
AWS / NDE	Certified Welding Inspector (CWI)																		X		
	Mag Particle (MP)																		X		
	Dye Penetrant (PT)																		X		
	Ultrasonic (UT)																		X		

PERSONNEL CERTIFICATION MATRIX - Peninsula Region										
		Scott Acoraci	Elizabeth Basler	Aaron Clyde	Geoffrey Fisher	Wes Mahan	Mark Peterson	Penn Seely	Bill Ugolini	David Wright
Nuclear Densometer Training			X	X	X	X	X	X	X	X
ACI	Concrete Field Tech - Grade 1		X	X	X	X	X	X	X	X
	Aggregate Testing Tech - Level 1			X						
	Concrete Lab Tech - Level 1			X						
	Concrete Strength Testing		X	X			X			
ICC	Building Inspector (Plumbing, Mechanical, Fire, Commercial, Electrical, Residential)	X							X	
	Combination Inspector	X								
	Soils				X	X			X	
	Reinforced Concrete (RC)			X		X		X	X	X
	Prestressed Concrete (PSC)								X	
	Structural Masonry (SM)			X				X	X	
	Fireproofing / Spray App. Fireproofing			X						
	Structural Welding (SW/SSW)			X		X				
	Structural Bolting (SB/SSB)			X		X				
WABO	Concrete Placement Insp. (PI)					X				
	Reinforced Concrete (RC)			X				X	X	
	Structural Masonry (SM)							X	X	
	Prestressed Concrete (PC)								X	
	Proprietary Anchors (PA)					X			X	
	Lateral Wood Framing (LW)								X	
	Laboratory Supervisor							X		
	Field Supervisor							X		
Other	AWS / NDE Visual Inspector (VT)					X				
	AWS / NDE Ultrasonic (UT)					X				
	NICET Asphalt, Soils, Concrete - Level II						X			
	Engineer in Training (EIT)		X		X					X



*Our Poulsbo office has supported the Olympic College on many projects including the College Instruction Center and Parking Lot, CSC 516 Renovation, and the Childcare Parking Lot, to name a few.*

PERSONNEL CERTIFICATION MATRIX - North Sound Region																											
		Joseph Aranas	Jacob Black	William Bui	Eddie Canfield	Vicki Congdon	Cole Demas	Jeff Dewey Jr	Jerry Gelder	Niccolo Guiao	Abdul Hashim	Jordan Kain	Don Keller	Young Kim	WingFung Lam	David Lane	Corbett Mercer	Jeff Mercer	Gordon Moe	Ken Sahi, PE	Nima Sherpa	Daniel Sleeman	Robert Smith	Yonas Teklemariam	Tuyen Tran	Ittaj Vahora	Zelalem Zerihun
Project Manager												X					X	X		X	X						
Nuclear Densometer		X					X	X	X	X		X	X					X									
ACI	Concrete Field Tech	X	X	X	X		X	X	X	X	X	X	X		X				X	X	X	X	X	X	X	X	X
	Concrete Lab Tech						X																				
WABO / ICC	Soils	X		X	X			X	X	X	X	X	X		X				X	X	X	X	X	X	X	X	X
	Reinforced Concrete	X						X	X	X	X		X						X	X	X				X	X	X
	Prestressed Concrete								X										X	X					X		X
	Structural Masonry							X	X				X						X	X					X		X
	Fireproofing																	X		X							X
	Structural Welding															X				X						X	X
	Structural Bolting															X				X						X	X
	Concrete Placement Insp. (PI)	X		X	X			X	X	X	X	X	X		X				X	X	X				X	X	X
	Reinforced Shotcrete								X				X						X	X					X		X
	Proprietary Anchors	X		X	X	X		X	X	X	X	X	X		X	X			X		X	X	X	X	X	X	X
	Lateral Wood Framing (LW)								X		X		X			X			X						X		X
	Firestopping								X																X		X
	Technical Director																	X		X							
	Lab Supervisor																	X		X							
	Field Supervisor																			X							X
AWS / NDE	Certified Welding Inspector (CWI)													X		X										X	
	Mag Particle (MP)															X											
	Dye Penetrant (PT)															X											
	Ultrasonic (UT)															X											



*Our Lynnwood office has supported the Bellevue College, Big Bend Community College, WA State Patrol, DSHS King Co Bed Expansion, Skagit Valley College, Lake WA Technical College, to name a few.*



## Budget and Pay Application Tracking Sheet

### INVOICES SUMMARY FOR GA-DOC-DSHS PROJECTS

KRAZAN PROJECT NUMBER	AGREEMENT NUMBER	CLIENT PROJECT NUMBER	ENTITY GA/DOC/DSHS	PM	Expiration Date	AMENDMENT NUMBER	BUDGETED AMOUNT	AMENDMENT NUMBER	BUDGETED AMOUNT	TOTAL BUDGETED AMOUNT	PROJECT NAME	Jun-2017				COMMENTS
												CURRENT INVOICE AMOUNT	INVOICED TO DATE	REMAINING BUDGET \$	REMAINING BUDGET %	
06615226	2015-803 B (2)	2015-021 B (2)	DES	Debra Deizell	10/15/2015	2015-021 B (2)	\$15,405.00			\$15,405.00	Centralia College - China Creek Parking Lot Improvements		\$5,025.54	\$10,379.46	67.38%	
10615161	2015-803 B (2)	2010-283 T (8)	DES	Dennis Flynn	12/31/2017	2010-283 T (8)	\$165,125.00	1	\$1,160.00	\$166,285.00	Olympic College - College Instruction Center		\$96,522.50	\$69,762.50	41.95%	
10416001	2015-807 C (3)	2016-281 A (4)	DES	Rafael Urena	1/23/2016	2016-281 A (4)	\$2,185.00	1	\$667.50	\$2,852.50	Peninsula College - Roofing and Bushing Repair/Replacement		\$2,821.25	\$31.25	1.10%	
09616030	2015-803 B (2)	2016-180 B (2)	ECC/DES	Lee Khawa	1/30/2017	2016-180 B (2)	\$2,735.00			\$2,735.00	Edmonds Community College - Gateway Foundation - Crack Monitoring		\$1,637.50	\$997.50	32.82%	
09416006	2015-807 C (3)	2015-066 T (3)	BC/DES	Bob Colasurdo	3/30/2016	2015-066 T (3)	\$2,605.00	2	\$475.00	\$3,080.00	Bellevue College - Building B Renovation - Hazmat Work		\$3,080.00	\$0.00	0.00%	
09616137	2015-807 C (3)	2015-066 T (3)	BC/DES	Bob Colasurdo	11/17/2016	2015-066 T (3)		1	\$12,670.00	\$12,670.00	Bellevue College - Building B Renovation - Testing & I Work		\$3,760.00	\$8,910.00	70.32%	
TOTAL										\$15,750.00		\$0.00	\$5,840.00	\$8,910.00	56.57%	
06616163	2015-111 C (3)	2015-111 C (3)	CPT/DES	Erasmus (Dino) Othieno, P.E.	12/30/2016	2015-111 C (3)	\$4,084.00			\$4,084.00	Clover Park Technical College - Building #32 and #37 Demo - Testing			\$4,084.00	100.00%	
09416011	2015-807 C (3)	2017-010 A (1)	DES	Christopher Gizzi	8/15/2016	2017-010 A (1)	\$3,093.00			\$3,093.00	Hazmat Cleanup - North Cascade Gateway Center		\$3,084.75	\$8.25	0.27%	
06616278	2015-803 B (2)	2015-664 Military Dept/DES	Richard A. Woodruff	6/30/2017	6/17/2011		\$2,080.00			\$2,080.00	Emergency response Vehicle Storage, Building 20C		\$1,630.00	\$450.00	21.63%	
10616248	2015-803 B (2)	2016-244 T (4)	Olympic College/DES	Dennis Flynn	11/20/2016	2016-244 T (4)	\$720.00	1	\$775.00	\$1,495.00	Olympic College - CenCom Building Renovation (Tendon Locate)		\$720.00	\$775.00	51.84%	
09616453	2015-803 B (2)	2016-921 D (4)	NSC/DES	Indra Jain	6/30/2017	2016-921 D (4)	\$2,755.00			\$2,755.00	North Seattle College Bldg. C - server Room		\$2,755.00		0.00%	
06617062	2015-803 B (2)	2008-113 S (8)	BTC/DES	Erasmus (Dino) Othieno, P.E.	6/30/2017	2008-113 S (8)	\$5,325.00			\$5,325.00	Communication Technology Ctr. - Bates Technical College			\$5,325.00	100.00%	
06616432	2015-803 B (2)	2016-738 T (2)	Centralia Coll/DES	Debra Deizell	2/1/2017	2016-738 T (2)	\$2,427.60			\$2,427.60	Dynamometer Testing - Centralia College		\$2,255.50	\$172.10	7.09%	
06617028	2015-803 B (2)	2016-255 C (3)	Clover PTC/DES	Erasmus (Dino) Othieno, P.E.	8/30/2017	2016-255 C (3)	\$6,757.50			\$6,757.50	Bldg. #5 Residential construction Renovation - Clover Park Technical College			\$6,757.50	100.00%	
09617034	2015-803 B (2)	2016-166 T (4)	ECC/DES	Lee Khawa	3/30/2017	2016-166 T (4)	\$1,225.00			\$1,225.00	Concrete Bridge Utility Tunnel - Edmonds Community College		\$832.50	\$392.50	32.04%	
09617047	2015-803 B (2)	2015-185 T (5)	BC/DES	Bob Colasurdo	8/1/2018	2015-185 T (5)	\$69,775.00			\$69,775.00	Student Housing - Bellevue College			\$69,775.00	100.00%	
06617057	2015-803 B (2)	2016-711 B (2)	TCC/DES	Diana Peoples	5/30/2017	2016-711 B (2)	\$2,720.00			\$2,720.00	MinnitField Bleacher Concrete Improvements - Tacoma Tech Col.			\$2,720.00	100.00%	
10617xxx	2015-803 B (2)	2016-009 T (2)	OCDES	Dennis Flynn	10/30/2017	2016-009 T (2)	\$7,165.00			\$7,165.00	Childcare Parking Lot - Olympic College			\$7,165.00	100.00%	
09417001	2015-807 C (3)	2017-149 B (2)	CSD/DES	Indra Jain	6/30/2017	2017-149 B (2)	\$1,360.00			\$1,360.00	Haz-Mat Survey - MPR Addition and Renovation - Couville School Dist. #204			\$1,360.00	100.00%	
06617xxx	2015-803 B (2)	2017-116 T (2)	PC/DES	Dennis Flynn	8/30/2017	2017-116 T (2)	\$1,690.00			\$1,690.00	LBS Minor Improvements - Pierce College			\$1,690.00	100.00%	
06617xxx	2015-803 B (2)	2017-737 T (2)	CC/DES	Debra Deizell	7/1/2017	2017-737 T (2)	\$4,019.50			\$4,019.50	Knoll Parking Lot - Centralia College			\$4,019.50	100.00%	
TOTAL AMOUNTS						30				\$353,712.15		\$0.00	\$169,030.84	\$194,681.31	56.04%	

## Project Manager Status Report

### Project Manager's Status Report for Dept. 096

Project No. 09602###: XYZ Project; Seattle

Client: ABC Company

Project Manager: Mercer, Jeffrey

Budget Status: Open

Contract Status: Need Signed Contract

Credit Rating: Good

Task Code	Task Name	Category Code	BUDGETED			EXPENDED			Last Entry
			Total Units	Unit Cost	Total Amount	Units	Amount	Perc.	
1 1	Geotechnical Engineer	Tech	10	\$85	\$850.00	0.00	\$0.00	0%	
1 2	Soil Bearing Verification	Tech	10	\$85	\$850.00	0.00	\$0.00	0%	
1 3	Soil Technician	Tech	20	\$55	\$1,100.00	0.00	\$0.00	0%	
1 4	Concrete Inspection	Tech	24	\$45	\$1,080.00	0.00	\$0.00	0%	
1 5	Sample Pickup	Tech	12	\$40	\$480.00	0.00	\$0.00	0%	
1 6	Reinforcing Steel Inspection	Tech	6	\$45	\$270.00	0.00	\$0.00	0%	
1 7	Anchor Bolt and Epoxy Inspection	Tech	6	\$45	\$270.00	0.00	\$0.00	0%	
1 8	Structural Bolting Inspection	Tech	10	\$60	\$600.00	0.00	\$0.00	0%	
2 1	Proctor and Sieve Analysis	Lab	2	\$250	\$500.00	1.00	\$250.00	50%	5/14/02
2 2	Concrete Compression Samples	Lab	24	\$16	\$384.00	0.00	\$0.00	0%	
3 1	Trip Charge	Misc	28	\$20	\$560.00	28.00	\$560.00	100%	5/16/02
3 2	Report Preparation	Tech	5	\$40	\$200.00	1.00	\$40.00	20%	5/15/02
3 3	Project Manager	Tech	2	\$80	\$160.00	0.00	\$0.00	0%	

Total Budgeted: \$7,104.00

Total Expended: \$850.00

Remaining Balance: \$6,254.00

Billed to Date:


## Daily Field Report

## Concrete Break Report

 <b>Krazan &amp; Associates, Inc.</b> Geotechnical Engineering • Environmental Engineering Construction Testing and Inspection		Page 1 of 1 Field Report NO: <u>0961620RDR8262016HM</u>	
DATE: 8/26/2016		Set Count: _____	
PROJECT #: 0961620S		CONTRACTOR: Pantley	
PROJECT: 162 T		PERMIT #: BLD 2015- 09801	
LOCATION: 16210 NE 80 <sup>th</sup> St		DESIGNATOR: House in Minnesota	
K.A.T.M.: Jeff Mercer		TRANSDUCER: City of Richmond	
		WEATHER: Sunny	
		TEMP: 82° F	
<b><u>Concrete Placement Inspections</u></b>			
Krazan representative arrived on site as requested to perform concrete pour observation and sampling on 8" wall at the following grid lines:			
<ul style="list-style-type: none"> <li>• E1-B-7</li> </ul>			
Contractor poured a total of 58 CY of concrete (Stoneway Concrete) using approved mix design 535174 having minimum compressive strength design of 4000 psi at 28 days. One set of five 4x8 concrete cylinders was cast for compressive strength testing marked as per (a).			
Test results are available on the test reports # 961620RDR8262016HM-1			
			
Reviewed By:	ASTM Test #	Asset Number(s)	
To the best of my knowledge, the above WAS performed in accordance with the approved plans, specifications and regulatory requirements			
Superintendent/Representative:		Technician:	

**Offices Serving the Western United States**  
 Lynnwood (425) 485-5519 • Poulsbo (360) 598-2126 • Puyallup (253) 939-2500

The information provided on this report is prepared for the exclusive use of the Client. This report may be regarded as confidential and may be the subject of a non-disclosure agreement with the Client. The report reflects only the information obtained and verified by the firm and is not intended to be relied upon by third parties. The firm assumes no liability for any loss or damage caused by the use of the report. The report is not to be used for any purpose other than that for which it was prepared.

 <b>Krazan Engineering &amp; Construction</b> Construction Engineering & Construction Engineering Construction Testing and Inspection		<b>PROBEC</b> PROJECT NO.: <b>1328CFR021814-NG</b>	
DATE: <b>7/16/2014</b>		CONTRACTOR: <b>ITM</b>	
PROJECT #: <b>2811233</b>		PERMIT #: <b>50438</b>	
PROJECT: <b>Deater Station</b>		INSPECTOR: <b>Nicosio Guiso</b>	
LOCATION: <b>1121 Deater Ave. N</b>		JURISDICTION: <b>City of Seattle</b>	
KA P.M.		TEMP: <b>21</b>	

Field Data							
Concrete: <b>X</b>		Other: <b></b>					
Supplier: <b>CapPortland</b>		Plant No: <b>207</b>					
Time	Track #	Ticket #	% Air	Bump	Moist	Unit	Weight
<b>8:35am</b>	<b>7024</b>	<b>901538</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>779</b>	<b></b>

Placed at	
Location: <b>South stairs (grate) above 1.2, 1.3 at grds K, B, L4-L5. Middle stairs on 1-L4-B at grds E, 3, 4, 4-B.</b>	

Remarks: <b>Placed by pump/truck. (5 cubic yards)</b>	
Please Refer to Field Support Number: <b>1328CFR021814-NG</b>	

Inspector: <b>Nicosio Guiso</b>	
---------------------------------	--

Reported Batch Data	
Concrete Type: <b>03</b>	
Design      Actual	
7. Min. Val	<b>154</b> <b>165</b>
8. Max. Val	<b>120</b> <b>99</b>
9. Avg. Val	<b>59</b> <b>107.9</b> <b>108.9</b>
10. Avg. Val	<b></b>
11. Max. Val	<b>1345</b> <b>1034</b>
12. Min. Val	<b>300</b> <b>275</b>
13. Avg. Val	<b></b>
14. Avg. Val	<b></b>
15. Min. Val	<b></b>
16. Max. Val	<b></b>
Water reduced On Job Site	
(Yes) <b>1</b> (No) <b>1</b>	

Field Test	
ASTM Method	
C143	C106
C158	C179
C261	Other

Laboratory Data		Design Strength: <b>4000 @ 28 days</b>		Date Specimens Rec'd: <b>7/23/2014</b>							
Col. Code	Test Code	Field Cure	Age	Com.	Area	psi	Area	Comps.	psi	Tested By	Test Method
48790-0	9/105/14		7	4x6	12.68	---	44050	3x70	5	RGJ	3
48790-1	8/15/14		28	4x6	12.09	---	55950	4x20	5	RGJ	2
48790-3	8/15/14		28	4x6	12.80	---	60590	4x70	5	RGJ	1
48790-4	8/15/14		28	4x6	12.69	---	61280	4x50	5	RGJ	1
48790-5	8/15/14		H	4x6	12.60	---	58570	4090	5	RGJ	2

Remarks	
<b>Results Reviewed By: CM      Date: 8/15/2014</b>	
Codes for Break Types:    1    2    3    4    5    6    7	

Test Results	
Conforming	

Lynwood (425) 485-5519 • Poulsbo (360) 298-2126 • Puyallup (253) 939-2500

## Proctor (Compaction) Laboratory Report

# Sieve Analysis Laboratory Report

